



THE JOEY DOSIMETER

USER INSTRUCTIONS

DESCRIPTION:

The Joey Dosimeter is a wide-band spectroradiometer used in neonatal phototherapy.

The response curve of the sensor is between 425nm – 475nm with the peak at 450nm. The meter measures irradiance in units of microwatts per centimeter per square nanometer ($\mu\text{w}/\text{cm}^2/\text{nm}$).

The Joey Dosimeter should only be used to measure the irradiance of the wavelengths of blue light, 425nm – 475nm, and for no other purpose.

A. USE WITH FIBEROPTIC PHOTOTHERAPY DEVICES

1. Place photosensor face down on fiberoptic panel.
2. Press the “PUSH TO READ” button.
3. The Joey Dosimeter measuring device has one scale ranging from 00.0 to 99.0 $\mu\text{w}/\text{cm}^2/\text{nm}$ (425-475). The light intensity ($\mu\text{w}/\text{cm}^2/\text{nm}$) can be read directly from the digital display.

B. USE WITH OVERHEAD PHOTOTHERAPY DEVICES

1. Aim photosensor face towards the light source and press the “PUSH TO READ” button.
2. Position the photosensor head close to the mid-point of the infant's body and at the same level as the upper surface of the body. To assure reproducible measurements, the sensor head should be placed in the same relative position to the phototherapy light and the infant for each reading.
3. The Joey Dosimeter measuring device has one scale ranging from 00.0 to 99.0 $\mu\text{w}/\text{cm}^2/\text{nm}$ (425-475nm). The light intensity ($\mu\text{w}/\text{cm}^2/\text{nm}$) can be read directly from the digital display.

NOTE: For optimum placement of the Joey Dosimeter, check with the overhead lights' manufacturer.

NOTE: A “LO BAT” signal will be displayed if the battery needs to be changed.

Output measurements should be taken whenever there is a condition that may affect the phototherapy light output such as but not limited to:

1. Before each patient use;
2. Operating hours of Photobilirubin device;
3. Cleanliness of device's optical system; and
4. Condition of light emitting pad.

BATTERY INFORMATION:

The Joey Dosimeter operates with a single nine volt (9V) nonrechargeable battery.

REPLACING THE BATTERY

1. Remove the battery compartment cover on the lower back side of the Joey Dosimeter.
2. Lift out the 9-volt battery and replace it with a battery of the same type.
3. Replace the battery compartment cover.

MAINTENANCE

CLEANING

Avoid getting **fingerprints, grease** or **dust** on the sensor. A dirty sensor will result in false low intensity readings. Clean the sensor with a water dampened lens paper and then wipe dry. **DO NOT** immerse in water or apply any water or commercial cleaning agents directly to the sensor and/or digital display, as this will cause damage to the device.

CAUTION: We recommend that the display window only be wiped using a soft damp cloth while exerting very little pressure. Rubbing your fingers across the display window creates static electricity, which caused false readings.

BATTERY

A weak battery will be shown automatically on the digital display – LO BAT.

RECALIBRATION

The Photobilirubin meter is calibrated against lamp standards traceable to the National Institute of Standards Technology. It is calibrated to be $\pm 2\%$ or \pm one digit (the least significant digit).

Proper calibration can only be accomplished with a National Institute of Standards traceable lamp standard. It is recommended that the instrument be returned to Respironics, Inc. for recalibration immediately if the meter has been physically abused (e.g. dropped, jarred). Otherwise, the recommended time period for recalibration is **ANNUALLY**.

Send the Joey Dosimeter measuring device for recalibration to:



RESPIRONICS INC.®

1001 Murry Ridge Lane
Murrysville, Pennsylvania
15668-8550 USA

RESPIRONICS®

Deutschland
Gewerbestrasse 17
82211 Herrsching Germany

WARRANTY

RESPIRONICS, INC. WARRANTS THAT THE JOEY DOSIMETER WILL, AT THE TIME OF SHIPMENT, BE FREE AND CLEAR OF ALL LIENS AND ENCUMBRANCES AND WILL BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF PURCHASE FROM RESPIRONICS, INC. RESPIRONICS, INC. EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL RESPIRONICS, INC. BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES DUE TO BREACH OF THIS WARRANTY OR ANY OTHER OBLIGATION.